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UNUNITED FRACTURE SUCCESSFULLY TREATED, WITH REMARKS  
ON THE OPERATION.

By HENRY J. BIGELOW, M.D., Professor of Surgery in the Medical School of Harvard University.

ABSTRACTS FROM DR. BIGELOW'S CLINICAL LECTURES ON THE SUBJECT,  
WITH CASES.

[Reported for the Journal by RICHARD H. DERRY.]

THE following paper gives the details of eleven consecutive cases of ununited fracture, successfully treated, with the exception of one, in which the bone was diseased. Such continued success justifies the belief that this operation will effect the desired object with more uniform certainty than any other method now in use.

Having failed, in a number of cases, to effect by rest, compression, blisters, seton, drilling, excision of bone, dovetailing, &c., a union of ununited fracture of the humerus, and having in mind the experiments of Ollier\* for the production of bone from periosteum, I determined, when the opportunity presented, to avail myself of the osteoplastic function of this membrane. In trying the experiment for the first time (Feb. 14th, 1860), I was not aware that any previous attempt had been made to produce bony union of ununited fractures by preserving the periosteum for that purpose; but in the ensuing spring, at the time of the successful issue of the case alluded to, I happened to meet with a paper recently published upon this subject, a superficial perusal of which seemed to show that its author had covered the ground, at least of novelty, in the method. The pamphlet was mislaid, and I thought no more of the matter, but had not infrequent occasion to repeat the operation, with successful result, and annually referred to the subject in my lectures before the class of Harvard University. A report of this method was also published† incidentally in connection with the testimony of the writer in a suit for malpractice, and afterwards alluded to in the *London Medical Times and Gazette*,‡ in which I stated that my own operation had

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\* Gazette Médicale, 1859, Nos. xiv. and xv.

† Boston Medical and Surgical Journal, vol. lxix. p. 218.

‡ February 6, 1864.

been anticipated abroad. Within a few weeks, however, my attention was directed, by my able house-surgeon, Mr. R. H. Derby, to the following paragraph in Holmes's System of Surgery :\*—

"Jordan ascribes the failure of resection to the removal of the periosteum. He, therefore, by means of some blunt instrument, as the handle of a scalpel, dissects this membrane from the portions of bone which he is about to remove, and leaves the two empty pouches passed one within the other, and, in some cases, connected by suture, to form new bone. The suggestion is undoubtedly theoretically sound. Its practical value, however, remains to be proved. In two of the three cases which Jordan records, it failed of success; and he admits its failure in the hands of M. Sedillot."

Upon again examining more carefully the original paper of Mr. Jordan,† I find that his method differs so essentially from my own as to explain both the failure of two out of three cases cited by him, and the almost uniform success of the cases reported in this paper. Briefly, in the method of Mr. Jordan, no means are taken to secure the perfect and permanent coaptation of the bones—a measure which underlies the success of the whole proceeding—if we except a suture of the periosteum, which is wholly inadequate to that object, and which must also give way in a short time. This omission alone is fatal to any considerable success in the operation.

2. The muscle is detached from the periosteum,‡ and the periosteum then pounded to detach it from the bone; measures both tending materially to devitalize the tissue upon which success most depends.

3. Mr. Jordan believes that suppuration hinders bony union, and therefore ingeniously modifies the whole operation for the purpose of preventing a suppuration which is in reality inevitable, and which must therefore be met and provided for, controlled and directed, and which does not prevent the desired result.

Finally, it may be added that an oblique section of the already tapered bone, as recommended by him, and especially the *rabbit*,§ is not to be advised, as it tends to denude and devitalize the protruding extremities; while an apparatus of plaster is hardly sufficient to ensure subsequent immobility, and one of gutta percha, by confining transpiration, is irritating to the skin.

#### ABSTRACT FROM DR. BIGELOW'S SURGICAL LECTURES AT THE MASSACHUSETTS MEDICAL COLLEGE.

The chief cause of ununited fracture is undoubtedly the severity of the local injury, although perhaps the constitution of the patient or an obliteration of the osseous artery may, in a few cases, have to do

\* Vol. i. p. 804.

† Traitement des Pseudarthroses par l'Autoplastie Periostique. Par Joseph Jordan, F.R.C.S., Chirurgien en chef de l'hôpital de Manchester. Paris, 1860.

‡ See Plate III.

§ An interlocking, called also in carpentry *rebate*.

with it. It occurs in an arm which has been run over, or after accidents from machinery, which bruise and devitalize the part. The obstinacy and persistence of this lesion under treatment are well known, and have arrested the attention of surgeons, who have devised many expedients, though often unsuccessfully, for its relief. The present operation must be deemed a successful one. \* \* \*

*Operation.*—The extremities of the false joint are to be attacked where they approach nearest to the surface, unless vascular or nervous trunks are in the way; in the arm, in all the cases I have seen, upon the outside; a free incision being contrived in each case with especial reference to the free exit of pus. In the arm, the musculospiral nerve, which is often displaced and tied by the lymph, is to be carefully looked for and avoided, and were it not for the care here requisite the bone might be exposed by a single incision. The principal bony extremities being found, the interval, which is sometimes quite irregular and interlocked, is gradually divided, and the ends turned out, the dissection being materially aided by an assistant who powerfully flexes the false joint. As it yields, care is taken to prevent the muscles from being stripped from the periosteum, which they adhere to and aid in nourishing. When one extremity is fairly exposed, a crucial or other regular incision is to be made in the ragged callus which overlies the periosteum at its tip, which should be then seized by strong-toothed forceps and efforts made to tear it out of the rugous inequalities of the formerly inflamed bone. After a little delay and dissection, the flaps begin to yield; with some coaxing, the terminal adhesions are detached, and the sound bony shaft is reached, where the periosteum is only too easily stripped from the bone, requiring great care lest the shaft should be denuded higher than the intended section. The soft tissues being now protected by spatulae, or flexible strips of copper, the end of the shaft is removed by a common saw, the length of this fragment being determined by the amount of periosteum it has been necessary to detach. A half an inch of good cylindrical periosteum, with half an inch more of ragged tissue hanging at its extremity, has usually covered from three quarters to an inch and a half of bone. Perhaps half an inch of sound shaft, with an irregular or conical extremity varying in extent, is a good rule for the excised piece in most cases. The other extremity is now to be turned out and treated in the same same way, and this terminates the dissection, leaving only the wire to be inserted. For this purpose holes are bored in each extremity with a good bone drill, larger than the wire, at a little more than half an inch from the end, and through one wall only. A pure silver or plated copper wire is inserted from without inward in one end, and inversely entered in the medulla from within outward in the other; the size of the wire ordinarily used is No. 10 of Stubbs's iron wire gauge. The ends are brought together accurately, and the wire twisted long enough to protrude at the ex-

ternal wound. The incision is then brought together by sutures, leaving an abundant exit for pus, and the apparatus is applied.

*Apparatus.*—The best apparatus for the humerus I have found, on the whole, to consist of a firm concave splint of iron and leather, made to fit the top and outside of the shoulder as low as the axilla, and thence horizontally to the neck, and secured by a strap around the opposite axilla; a similar gutter to receive the elbow and forearm flexed at a right angle; and the two united by a narrow iron strap on the back, and another on the front of the humerus, adjustable as to its length. The splint can be thus shortened when in place, so as to keep the extremities of the bone in contact, and nearly immovable, in spite of the great leverage of the arm upon the wire, while the dressings can be readily applied in the open interval, without disturbing the apparatus.

For the thigh, a pasteboard splint may be moulded to the anterior aspect of the thigh and leg, and then stiffened with dextrine, an interval for the wound being left. The whole limb is then secured to this by bandage; and surmounting the whole, a Smith's anterior splint is applied, by which the leg is suspended from a railway on a framework over the bed.

I have usually employed water-dressings at first, and poultices or oakum to absorb the discharge afterwards. The patient has remained in bed for several weeks, and in fact till some stiffening has taken place, after which fresh air has been enjoined as an invigorating and osteoplastic agent. The diet has been as generous as the appetite would bear, and the phosphates have been generally administered, upon the principle of giving egg shells to hens.

The wire has remained in place until the bone was firmly united, generally during several months, and there has been in no case evidence of any ill effects from its presence, either in producing necrosis or undue inflammation. In fact, it has, in some cases, remained quietly in place after the arm was in use, and before the patient returned for its removal. In Case II. the wire remained for two years.

To remove the wire, the loop is best divided with cutting pliers, and forcibly drawn out; hence an advantage in flexible wire. This loop is sometimes quite superficial, but in other cases is so deep as to require an incision to reach it.

It may be remarked that a partial stiffening, dependent on the inflammation of the soft parts, may take place in a few weeks, but the bone afterwards becomes gradually loose if the periosteum fails to do its duty.

The one great point to be observed in treatment is the prevention of abscess, or, in other words, the early and free evacuation of imprisoned pus, by large and dependent incisions, which here as elsewhere are incomparably less injurious to the tissues than the burrowing of pus. Again, the formation of an abscess is always attended



with fever, which destroys appetite and weakens the patient. Hence especial care is needed to detect any inflammatory induration supervening after suppuration has begun, and the first decided pointing should be the sign for an opening, to be explored by the finger, and enlarged inside or outside accordingly. I need not say that it is, in general, cruel to use the knife without an anæsthetic, but here the careful exploration and the tearing of the adjoining sinuses with the finger, if adequately done, absolutely demands it, for the comfort of both surgeon and patient. After a long experience, I have never seen a patient, unless already moribund, really worse for ether, and I have often seen a weak person prostrated by the excitement and suffering of an operation, when it was withheld by the timidity or haste of the surgeon. As for freezing, it is sometimes more convenient for short and superficial incisions, and in private practice, but when its novelty is gone it will yield in other cases to general anæsthesia.

In operating upon the humerus, the musculo-spiral nerve demands especial consideration. Winding around the outside of the arm near the usual place of incision, it is sometimes difficult to avoid it, especially when displaced by the deformity, and tied into an indurated mass of lymph. I have twice accidentally divided it, in spite of more than ordinary care; once completely, and once leaving only a single fibre at one side. In one case, an operation had been undertaken one month only after a previous one, while the arm was still inflamed. It was on that account absolutely impossible to keep the wound dry, and after a protracted dissection the knife was at last used beneath the blood; the nerve was imprisoned and concealed in a deep groove in the new bone, and was divided in separating the bones. On this ground, I should not advise a second operation until the traces of active inflammation from a previous one had disappeared. In this instance the neurilemma was re-united by a small suture. In both cases, the power of the paralyzed extensors ultimately returned, completely and unequivocally. In another case, now under treatment, partial paralysis ensued after the operation, but the nerve had been nowhere seen, and could hardly have been divided. On the other hand, the fragments were so short that a powerful and continued effort had been required to make their ends protrude, jamming the muscles in their interval, and very likely thus injuring the nerve. The fingers are now regaining their motion. In the same case, which was one of gun-shot wound, the operation twice failed, there being still some necrosis about the bone, of which the lower fragment was enlarged to at least double its diameter. In a future case, I should consider that necrosis contraindicated the operation, if there were any good chance of getting rid of it by time or interference.

The case most favorable for operation is undoubtedly that of a healthy subject, where the bony extremities are of natural size. In a case of long standing, atrophy tapers the bones, which need in

consequence longer excision. Other things being equal, it is better not to wait unnecessarily.

The only case I have encountered of ultimate failure, was one of extreme softening of the bone by interstitial absorption, a condition which was not ameliorated by invigorating measures, including the free and protracted use of the phosphates.

#### CASE I.—HUMERUS.

Patient, E. J., aged 22, entered the Hospital, October 15th, 1857. Eleven months before, his right arm was caught in a "splitting machine," and drawn in between the cylinders. A compound, comminuted fracture of the radius and ulna was produced at about their middle; and a compound fracture of the humerus rather below the middle. The fracture of the humerus did not unite, that of the forearm did.

October 14th.—A seton was passed between the fractured ends.

February 24th, 1858.—No union. Seton removed. Subsequently, emplastrum cantharidis was applied over the fracture; the ends of the bone were rubbed together.

May 12th.—No union. An incision was made over the fracture; the two ends were exposed, and an inch removed from each.

November 21st.—He was discharged, not relieved.

November 15th, 1859.—He returned to the Hospital; the arm was perfectly useless, and occasionally caused pain. He was prepared for anything that should offer a reasonable prospect of success, or even amputation as a last resort.

December 17th.—He was etherized, and, with the view of producing irritation, each fractured extremity split with a pair of strong forceps, made for the purpose with chisel blades (which punctured the skin at opposite points, and slowly penetrated the bone, the ends of the forceps being placed in a vise), and a splint applied, consisting of a shoulder-cap, with a band around the opposite side, and a cap for the elbow and forearm. These two caps were made to advance towards each other by a screw, so as to crowd the ends of the bones together.

18th.—Comfortable.

January 15th, 1860.—In consequence of pain about the shoulder, the apparatus was removed, and the arm bandaged. Little or no union.

February 14th:—*Operation by Dr. Bigelow.* He was etherized, and a crucial incision made over the external surface of the arm over the fracture. The band of ligamentous tissue connecting the bones was divided, and each extremity of the humerus turned out. The periosteum was carefully detached, for an inch or more, from each end. The denuded ends were then sawed off. A hole was drilled through each end, and a stout silver wire passed through. The ends

of the wire were then twisted, and the ends of the bone brought into exact apposition. The external wound was united with sutures; the ends of the wire were left protruding, and the former splint re-applied. After the operation, opiates were needed and freely given.

21st.—Wound smelling badly. A solution of chlorinated soda injected under the apparatus.

25th.—The apparatus was removed, washed and reapplied.

March 5th.—Wound closing by granulation. General condition good.

23d.—Arm apparently stiff.

29th.—To-day, the arm and shoulder becoming somewhat painful from pressure of splint and necessary want of cleanliness, everything was with great care removed; on slight examination of the arm, no motion was detected. The arm and shoulder were then carefully washed, lateral splints applied, and the hand and elbow supported in a sling.

April 4th.—The dressings were again removed. Slight mobility was detected at the point of fracture. As, however, only six weeks had elapsed since the operation, it appears to have progressed as rapidly as any compound fracture of an equally severe character could be expected to do. External wound nearly healed.

23d.—Apparatus frequently removed. Union firmer.

June 13th.—Union appearing to be very firm, and the wire causing some pain, there appeared to be no further indication for its remaining longer. He was etherized; the wire was untwisted and removed.

July 1st.—Arm was stiff and strong, with considerable motion in the elbow.

July 12th.—At request, patient was this day discharged, being able to return to his work, which is that of a leather splitter. The arm appeared to be nearly as useful as the other one.

#### CASE II.—RADIUS.

Patient, A. D., farmer, aged 56, entered the Hospital February 6th, 1861. Four years before, he received a fracture of both bones of the right forearm, with other injuries, by being caught in machinery. Splints were applied and kept on for nine weeks, the patient being confined to bed during this time on account of necrosis of both tibiae, resulting from the injuries sustained. At the expiration of this time there was no union. A starch bandage was applied and allowed to remain for four months, but no union was secured at the point of fracture. During this time his health continued good. Nine months after the receipt of the injury, an incision was made over the lower border of the forearm, the ends of the fractured ulna were turned out and sawed off, and the extremities then wired together. Various other means were subsequently resorted to, but with no success.

On entrance, the fractured ends of the ulna could be felt distinctly; there appeared to be some ligamentous union in the radius. He had a very considerable use of the hand.

February 9th.—*Operation by Dr. Bigelow.* He was etherized; a tourniquet was applied over the brachial artery to keep the wound dry. An incision was then made along the upper border of the radius, about two inches in length. The ends of the bone were turned out, the periosteum was dissected up, and about half an inch of each fragment sawed off. A hole was now drilled through the upper wall into the medullary cavity of each end, and the ends of the bone firmly wired together by means of a stout silver wire passing through the holes and twisted. Two small arteries required ligature. The edges of the wound were drawn together by sutures and a compress applied. The arm was placed in an external angular splint, and bandaged firmly, to prevent motion.

12th.—The pain in the arm is quite severe and constant. Considerable swelling about the wound. The bandage is daily removed.

March 1st.—Wound nearly healed about the wire. Appetite and strength excellent.

23d.—Patient allowed to go home, to return for the removal of the wire.

February 13th, 1863.—Patient has been able to saw wood with his right arm. He came to have the wire removed, which has remained since the operation.

14th.—He was etherized. An incision half an inch in length was made over the point of fracture; the wire was divided, and easily removed, two years from the time of its insertion.

#### CASE III.—HUMERUS.

Patient, J. C., laborer, aged 24, entered the Hospital November 4th, 1861. Eight months before, while turning the crank of a hand-car, he became entangled in some way, and his left arm was drawn under the crank and fractured above the elbow. A physician applied splints to the arm, and for two weeks took them off and reapplied them every day. At the end of eight weeks the splints were removed, but no union found at the point of fracture. Four months ago, the fractured ends of the bone were rubbed together, but with no success.

Now, the left arm is about one inch shorter than the right, from the ends overlapping each other. The fracture extends from a point about four inches from the lower end of the humerus, on the outer side of the shaft of the bone, obliquely inwards and downwards, terminating at a point about two inches above the internal condyle. Crepitus and motion in the fracture are very distinct. There has apparently been no callus thrown out around the fracture. Motion in the elbow-joint is perfect.

November 9th.—*Operation by Dr. Bigelow.* Patient was etheriz-

ed. An incision, three and a half inches in length, was made through the skin over the seat of fracture. The subjacent fibres of the triceps were then divided, as was also, accidentally, the musculo-spiral nerve, with the exception of a single fasciculus, by which the extremities hung together, and which was afterwards carefully respected. The ends of the fractured bone were then turned out; the periosteum was carefully detached from both; a piece one and a half inches long was sawed from the lower fragment, and a piece one inch long from the upper. A hole was then drilled through each end of the fractured bone, and the two surfaces kept in apposition by a silver wire, passed through the holes and the ends twisted. An inside and outside angular splint, well padded, were then applied. A single suture was introduced to keep the edges of the wound slightly in apposition. The extensors of the hand are paralyzed.

13th.—Splints were removed and reapplied. Position excellent. Slight suppuration in wound.

16th.—Splints removed, and arm dressed.

21st.—He has slight paralysis of sensation on the posterior radial aspect of forearm, and no sensation over the back of thumb and radial side of forefinger.

29th.—Appetite poor. Pulse accelerated.

December 17th.—Slight stiffening at point of fracture.

27th.—Considerable stiffness in humerus. Wound nearly closed.

January 10th, 1862.—Union moderately firm.

March 1st.—On careful examination, a slight yielding was detected at the point of fracture.

11th.—A small piece of necrosed bone came away from wound.

May 10th.—Patient was etherized. An incision was made down upon the wire, which was then extracted.

22d.—Discharged, well.

This patient wrote, April 28th, 1867, that he was a "section hand on the Northern Railroad," had not lost a day since he left the hospital, and was "well, doing the hardest kind of work." Sensation and motion in hand perfect.

#### CASE IV.—HUMERUS.

Patient, E. D., laborer, aged 31, entered the Hospital December 4th, 1862. A year before, his left arm was caught by a revolving shaft, and the humerus fractured. The skin was much contused, but not penetrated. A physician was called, who, after examination, pronounced the humerus comminuted through nearly its whole extent. He applied splints, bandages, &c., and on the third week reapplied them, at the same time making considerable extension to bring the fragments into position. At the end of the fourth week he announced that the union was getting firm, and a week later he removed the splints and applied strips of pasteboard. A few days after this, by a sudden movement, the fragments were displaced, although very

slightly. After two weeks, they had become firmly united again, by the report of the physician. In the middle of May, he reported that all was well united, but not strong, and applied bandages, &c., with the intimation that it would be a year before the union would be strong enough to bear hard usage. Three weeks after this, the patient had the bandages removed to wash the arm, and his wife at once declared that the bones were loose. Various measures were then taken to procure union. For the past four months he has not interfered with the false joint, but has given his attention to recovering the motion of the elbow, stiffened by long disuse. Now, he has a false joint a little below the middle of the humerus.

December 6th.—*Operation by Dr. Bigelow.* Patient was etherized. An incision, four inches long, was made over the outer aspect of the false joint, and the ends of the fragments were exposed. Both ends were irregular in shape, especially that of the upper fragment. They were bound together by a tough, pearl-colored, gristly material, quite firm to the knife. The periosteum was dissected up and turned back from about an inch of the end of each fragment; the ends were then sawed off square, and a hole bored through each fragment at a point a quarter of an inch from their ends. The two fragments were then brought into apposition and held in place by a silver wire passed through these holes and twisted. The free ends of the wire were long enough to project from the wound. Sutures were then inserted, and angular splints, external and internal, were applied.

10th.—Suppuration well established. Splints removed, and wound dressed.

20th.—He has lost appetite during the last twenty-four hours. On removing splints, an erysipelatous blush was seen over the whole upper arm. *R.* Quiniae sulphat., gr. ij., ter die. Beef-steak and wine, if he will take them.

24th.—Splints changed. Doing better.

January 2d, 1863.—Patient is quite strong and cheerful. On removing the splints to change dressings, considerable stiffness is found in arm. Suppuration is moderate; the wound is closed, except immediately about the ends of the wire.

4th.—Considerable pain at the point of fracture, and in elbow.

14th.—He walks about.

16th.—The pus has burrowed towards the elbow. Much weaker. Beef-steak, wine and eggs.

23d.—There is tenderness and redness over the internal condyle, apparently from the commencement of a large abscess.

27th.—He has been very wretched since the last record, from great pain in the abscess. The splints were unbearable and were removed yesterday. The arm is laid on a large poultice, with an external straight splint. The abscess was freely incised under ether, and the various sinuses were torn into one.

31st.—Patient was etherized, and the wire cut and withdrawn.

February 4th.—Patient is improving wonderfully. He sits up all day, and walks about freely.

18th.—Wound entirely closed.

26th.—The arm is quite stiff at the point of fracture.

March 9th.—Discharged, well.

[To be concluded.]

### Reports of Medical Societies.

EXTRACTS FROM THE RECORDS OF THE NORFOLK DISTRICT MEDICAL SOCIETY OF MASSACHUSETTS. BY Z. B. ADAMS, M.D., OF ROXBURY, ASSIST. SECRETARY.

THE annual meeting of the Norfolk District Medical Society was held at the Phoenix House, Dedham, May 8th, 1867, at 11, A.M. In the absence of the President and Vice President, Dr. C. C. Holmes, of Milton, was chosen Chairman. The records of the last meeting were read and accepted. A committee was appointed to nominate officers for the coming year.

The Treasurer, in a humorous strain, made his annual report. Accepted.

*Voted*, To adjourn for dinner at 1½ o'clock.

Dr. J. Russell Little, of Jamaica Plain, having been examined and accepted by the Censors, signed the By-laws, and became a member of the Society.

Drs. Seaverns of Roxbury, C. E. Stedman of Dorchester, J. Stedman of Jamaica Plain, and E. Stone of Walpole, were appointed a committee to report a subject for discussion at the next meeting. This committee subsequently reported "The Treatment of Pneumonia" for the subject, and it was accepted by the Society.

On report of the Committee on Nominations, the following officers were chosen, by ballot, for the year 1867-8:—*President*, Dr. B. E. Cotting, Roxbury; *Vice President*, Dr. Jonathan Ware, Milton; *Secretary*, Dr. Edward Jarvis, Dorchester; *Treasurer*, Dr. Eben P. Burgess, Dedham; *Librarian*, Dr. David S. Fogg, South Dedham; *Councillors*, Drs. B. E. Cotting, J. G. S. Hitchcock, Edward Jarvis, S. Salisbury, Ira Allen, E. P. Burgess, C. C. Holmes, A. LeB. Monroe, Eben Stone, Benj. Cushing; *Censors*, Drs. G. Faulkner, W. C. B. Field, J. Seaverns, C. C. Tower, J. S. Greene; *Commissioner of Trials*, Dr. Ebenezer Alden; *Committee of Supervision*, Drs. J. P. Maynard, J. A. Stetson; *Orator*, Dr. Z. B. Adams.

Dr. Alden, of Randolph, read a paper on the question "Whether Alcohol is Food," showing that, in his opinion, it is not, and that, if it supports respiration, it does so at the expense of other functions.

Dr. Noyes, of Needham, read a paper on the Medical Botany of Norfolk County, being a continuation of that printed in this JOURNAL April 25th, 1867, p. 235. The object of this paper was to call attention to some of the principal plants now springing up or coming into flower, so as to enable the beginner to find and distinguish them without trouble.

Dr. Greene, of Dorchester, read a paper written by Dr. Jona. Ware, of Milton, Vice President of the Society, describing a case of obsti-



nate eczema which occurred in his own person during the past year, he being now seventy years of age. A diarrhœa, together with asthma and rheumatism, which had afflicted him of late years, had almost entirely ceased during the progress of the eczematous affection.

Dr. Burgess, of Dedham, read a paper which was an abstract of the conclusions arrived at in a longer paper he had prepared as a review of *Ranking's Abstract and Brailhwaile's Retrospect*.

The venerable Dr. Walter Channing, now a resident in this District, being present, was asked to give the Society something from the notebook of his long and wide experience. Dr. Channing said that, in thinking over the subjects of medical interest, he had hit upon dysmenorrhœa, which he said was looked upon as almost the despair of medicine. Dr. Warren, who most frequently employed the ammoniated tincture of guaiacum in this disorder, told him that he had known one case to recover. This was in a lady who, after undergoing an attack of double pneumœnia, and being bled, salivated and blistered, was found, after convalescence, to be entirely recovered from her dysmenorrhœa. He then spoke of a pill which he had used of late years with almost universal success, consisting of quiniæ sulphat.,  $\mathfrak{z}\text{i}$ .; extract. belladonnæ, gr. xii.; extract. conii,  $\mathfrak{z}\text{ss}$ . a  $\mathfrak{z}\text{i}$ . M. et ft. in pil. lx. One to be taken three times a day, and no more than one. He said that gin and black pepper was a remedy frequently employed in this disorder, but that his pills had succeeded when that had failed.

Dr. Alden then presented a very remarkable elongated oval body passed from the intestines. It was very perfect in form, about  $1\frac{1}{2}$  inches long by  $\frac{3}{4}$  of an inch in diameter, being perfectly smooth upon its exterior, and presenting a brown mottled appearance. In the interior it showed regular layers of a chalky whiteness in the middle, but growing yellow and dark brown towards the exterior. Its consistence was like that of ordinary chalk.

A syringe was shown for opiate injections per anum. It was a common half ounce glass syringe, with a metal pipe two or three inches long, of adult size. The transparency of the glass enables the operator to know exactly whether the prescribed quantity is administered; and the length, size, and strength of the pipe ensures its being carried sufficiently high up the bowels.

Dr. G. W. Fay, of East Weymouth, showed a photograph of a case of Lupus, following a blow on the tip of the nose twenty-three years ago. The disease has now destroyed the nose and a large portion of the face.

Adjourned for dinner at  $1\frac{1}{4}$  o'clock.

After dinner, Dr. Cotting, being present, assumed the chair, and showed to the Society a large package of published papers, which had been read before the Society during the past two years.

A notice of Dr. P. Garnier's Dictionnaire Annuel was then read by a member, which commended the work in the highest terms, and with discreet criticism, to the attention of the profession.

Dr. Greene read a paper on a brochure by Dancel, entitled, "Correction of forms in the human body, and as a consequence, the promotion of perfect intellectual development through hygienic means." He said that the author, Dancel, claims with reason to have first given the hint of the proper treatment for correcting obesity, since claimed by Banting for a London Doctor.

There appearing no other business before the Society, the President said that he had come prepared to deliver a valedictory, as there was no reason why he should be called upon to continue to act as President of the Society, having already passed the allotted time. Two years ago, when he was absent in South America, the Society had done him the honor, all unsolicited, to choose him their President; that the time of his demission had, according to the usual custom, already arrived. He would, however, while thanking the Society for the honor they had done him by their re-electing him to the President's chair, read from the semi-valedictory, which he had prepared, as follows:

\* \* \* \* During the past two years cholera has largely occupied the attention of the profession. Associations have all discussed it. The periodical press has been loaded down with communications upon it. In all this our Society has had its proportionate share. As in other outbreaks, but perhaps in this more than in any other, as the disease seemed approaching, medical opinion tended to contagion or "communicability;" and multitudes of impracticable measures were proposed, and more or less advocated. But, when the disease became actually present in any locality, most of these schemes were abandoned or neglected; and, here as elsewhere, all went to work and fearlessly labored as though contagion had never been thought of.

It is hardly yet time to estimate what we have learned in these two outbreaks—something positive however, we hope, in the "visible phenomena," those changes general and minute which take place after a disease has seized upon the victim—something negative, in proving the uselessness of many former methods of treatment and general management. We would fain hope that the "period"\* of its continuance in the world is near its end, but we cannot avoid suspecting a little pleasantry in putting the time when, by human agency, "cholera will become an unknown disease to future generations on this continent," into that conditional paulo-post futurity when "restrictive intercourse shall be complete," or, what is nearly the same thing, when every man shall stay at home and mind his own business.

Helminthology has lately claimed much attention. The prevalence of trichinae in some parts of the Continent of Europe, and here and there in this country, has aroused a painful interest in the public as well as the profession. Especial study has been given to tape worms in England; and the unexpected result arrived at that a large proportion of these entozoa in that country are derived from other "butcher's meat" than pork. In one hundred and twenty specimens Cobbold found that ninety-five were from beef!

In Bahia, the investigations of our learned associate, Dr. Wucherer, have shown that a form of anemic decline, there called *canção*, prevalent among the negroes of that region, is due in great measure to the ravages of the ancylostomum, found by him in great numbers in the alimentary canal of the victims. At Lyons a new human entozoon

\* Quocircæ opinari mihi fas sit, morbos certos habere *periodos* pro occultis illis atque adhuc incomptis alterationibus quæ ipsius terræ accidunt visceribus, pro varia scilicet ejusdem ætate ac duratione; quodque, sicuti alii morbi jam olim extitere, qui vel jam ceciderunt penitus, vel ætate saltem pene confecti exolvere, et rarissime comparent (cujusmodi sunt lepra, atque alii fortasse nonnulli) ita qui nunc regnant morbi aliquando demum intercedunt, novis cedentes speciebus, de quibus nos ne minimum quidem hariolari valeamus.—SYDENHAM, *Obs. Med.*, v. 4, 16.

has been discovered—a larva between two and three inches long, very adherent to the mucous membrane; to which M. Lortet has given the name of *Helophilus horridus*.

The annoyances occasioned by most parasites, and the destructive effects of some of them, have, it seems to me, been improperly called diseases. For however fatal they may be, they are still mechanical injuries, and no more entitled to such appellation than damage "from fire or caustic, fracture or a musket ball."

Throughout nature parasites seem to be a rule; their absence, the exception. They seem to have periods of prolificness, as diseases have of becoming epidemic. It is pretty evident also that individual capacity to harbor such creatures is variable, and dependent somewhat on imperfect constitutions or local power. Still their continuance appears to have been as carefully provided for as that of the principals themselves. Indeed, if the frequent duality of their habitat is considered, the natural history of the parasite is the more wonderful. The conclusion of Cobbold that "we human beings are essential to the existence of particular species," may not be very flattering to those who would have us believe that the universe and all within it were made for man alone; but science has nothing to do with such absurd doctrines. What *is*, and not *why* it is, should be the great object of scientific investigations. The ultimate purpose of parasites, disease, and even life itself, it is not for man to determine.

Throughout Great Britain during these two years past, more than ever, students have been urged by their teachers to study the natural history of diseases; though judging from reports of their cases very little opportunity is given them for so important a purpose. Still it is something to recognize that disease *has* a natural history, and augurs well for the future progress of Rational Medicine.

The change-of-type theory, so long and ardently maintained, is now nearly abandoned. The lectures of Dr. Markham, and the recent conversion of Sir Thomas Watson have given it the finishing blow. "There is" (says the *Lancet*, Editorial, Dec. 1866) "a steady setting in of scientific opinion in favor of the view that a great discovery has been made—that general disease remains the same in all times, and admits of a better treatment than was formerly practised." When there shall be a little further advance, and a clear perception that disease for the most part comes to its end, not by being driven out by antagonistic agencies in the system, but because it has finished its natural history (as a leaf falls when ripe, having served its purpose, and not because of the frost), then will a new dawn arise upon the noon of English as well as American practice.\*

Medical education—and this is the last general subject we shall

\* Without denying the *possibility*, in the distant future, of discovering *specific remedies* so called, it is enough for the present that the probability of such discovery is very shadowy. Of former reputed specifics hardly a single one remains; and very few if any diseases are believed by anybody to have their antidotes in drugs. Until quite lately, intermittent fever and syphilis have been the strongholds in the "arguments" of nosoclasts. Mr. Wilks, of Guy's Hospital, in his recent most instructive lectures, *Lancet* (reprint), April, 1867, says:—"I have already said that syphilis is a specific contagious disease [not, necessarily, venereal], and that in not a single example to which it belongs have we any knowledge of a remedy properly so called. Each runs its course." This, in fact, is the present received opinion of experts.

When some one shall do for intermittent fever and quinine (and no one can do it better than he) what Mr. Wilks has done for syphilis, mercury, and iodine, "abortive treatment"

allude to, for we are not making a catalogue—medical education has lately been brought prominently before the profession and the community—in England, by the failure of graduates to pass the Army and Navy Boards, and other local causes; in France, by the constrained demission of nearly a fourth of the Faculty at Paris; and in this country, by the acknowledged necessity of more uniformity, and the continued multiplication of schools with power to grant degrees.

Little advance in the matter has been made as yet on the other side of the water; and, as no definite plan has been arrived at in this country, every one is at liberty to make his own suggestions. It would appear then that the time has come for some one of the old established schools to take a new position—to exact for matriculation the requirements for admission to the Freshman Class in College (including the Latin and Greek, which are needed in this if not in other professions), with the addition of elementary chemistry and physics; to require the student to continue the whole year (as in College, Divinity and Law schools)—to apportion the studies for each year, with frequent recitations, and examinations yearly for promotion from one class to the next; reserving clinical instruction, the care and management of the sick, for the last year. The present rule "to study under the direction and to attend the practice of some respectable physician," was well enough in times past, but hardly meets the requirements of the present day. The medical school which shall take such a forward stand as this, will soon attract to it the best students of the whole country, for there are enough who really wish a thorough education; and its degree will be recognized by the public as well as the profession as one of great value—quite worthy of special designation whenever the title shall be appended to a graduate's name. It is vain to wait for combined action; let a trial be made by a single school of established character. One school, taking such a stand, with ability and determination to carry it out, would do more for medical education than all the resolutions of associations and all the conventions of professors in the country put together. Once done, the populace as well as the profession would acknowledge its wisdom, for real learning has not altogether lost its influence even with the crowd. What graduate of Harvard would not rejoice to see his Alma Mater, regardless of temporary interests, step forward and take such high ground for the cause of professional science and the general good of the community?

But in a profession like ours, which even now requires of its candidates an acquaintance with "a longer list of distinct sciences than is required for any other" \* \* \* \* "the never-ending struggle after knowledge and truth" has but begun at graduation for those who take an elevated and enlarged view of their calling. And here come in the great advantages of societies, for it is as true of our profession as of that of which it was written, that "those actively engaged in

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will be untenable, and medical attendance on the sick, then requiring more knowledge and skill, will become more useful and *curative* than routine practice.

We have heard, long ago, intelligent persons residing in malarious districts assert that, although quinine had certain immediate effects, those were ultimately better off who abstained from taking it in intermittent fever. "The sequelae of 'quininitis' are truly deplorable."

*A drug may be very useful in a disease without being a specific or a remedy; a fact which seems to be forgotten by those who "believe their doses are working a cure."*

daily routine need means of continuous culture, that the impulse created by their preparatory discipline may not be too soon spent and forgotten in the task-work of life; something to suggest and freshen thought, to invite investigation, to stir up the old enthusiasm, to allure to new paths of research; something to keep the mind in communication with the prevailing currents and tendencies of opinion" in the profession itself and in the world around it. To be sure, Societies will not give any one, if he has it not by nature, the practical *ρως* or *αγγιολα* Dr. John Brown speaks of, which enabled "the raw 'prentice lad" to stop an uterine hemorrhage with "a wooden *bicker* and a tight binder," but the Reports of such cases of "readiness or nearness of mind," such for example in our own Society as the "procédé inquisitorial," cannot but assist the needed "power and promptitude" in all who listen. It is not, however, my intention to argue the utility of societies for scientific advancement or individual progress; enough that this is universally admitted, some going so far, even, as to put under the ban those who not actively assist in the county, or district societies;\* as our State Society does all who do not join its ranks when qualified. Happily the members of this Society have been ever ready to render its meetings interesting and useful; and never more so than during the past two years. In this short time thirty-seven papers have been read at the meetings, of which twenty-seven have been published in the Boston Medical and Surgical Journal. Some of these papers have been copied or quoted in other periodicals, here and abroad, or epitomized for more permanent record in foreign year-books. This surely is not a mean or despicable record for a District Society whose active members are mostly engaged in the wearisome routine of country practice. Besides, at each meeting there have been animated and well sustained discussions of subjects of professional interest, together with free and instructive criticisms on the papers read. In this way the Society continues to be one for mutual improvement, in which the writer of a paper, by the discussion and criticism which follows its reading, gets his full share. And let no one despise this "paper" writing. As a means of self-improvement there is hardly a better. It is not an easy thing to write an unexceptionable "paper." Let any member who thinks it is, and has not tried it, make the attempt, and he will soon discover his error. He need not try to advance any thing new, that is often a hopeless task; let him only attempt to reduce to the limits of a short and symmetrical essay *what is known* of any one of the ordinary subjects of professional consideration—the simplest disease, or the commonest drug, for example—and he will find what labor it is to bring his thoughts and learning, often too loose and scattered, into the faultless article he would exact of others. But this labor will do himself a service, will be an efficient means of instructing himself if no one else, which is hardly supposable, so that in the end, each member having taken his turn, the whole Society is advanced. Let then these practices be continued, and if any outside our circle are benefited by our efforts, or are led to surpass them, we shall have double cause to rejoice in our labors.

\* The Montgomery (Penn.) County Medical Society in a *resolve*, passed last year, regret that some members have kept aloof from the County Societies, "thus ranging themselves," says the resolution, "on the side of those whose unprofessional conduct, or low standard of medical attainments, or disregard of medical etiquette, prohibits from membership in such societies."—*Philadelphia Medical and Surgical Reporter*, May, 1866.

## AMERICAN MEDICAL ASSOCIATION.

*Convention of Teachers of the Medical Colleges of the United States.*

WE are indebted to Dr. D. H. Storer for copies of the *Cincinnati Commercial* containing the report of the meetings of the American Medical Association and the Convention of Medical Teachers, which we print this week as far our space will permit.

In compliance with a call of a Committee appointed by the American Medical Association, at its last annual session, held in Baltimore, May 3d, 1866, delegates from most of the medical institutions of the country met on the 3d inst., at 10 o'clock, in the faculty room of the Medical College of Ohio.

Professor Davis, of Chicago, Chairman of the Committee, called the meeting to order, and, after stating its object, proposed, with a view to facilitate the perfection of a permanent organization, the appointment of a temporary Chairman and Secretary. This proposition being accepted, Professor A. Stillé, of Philadelphia, was elected temporary Chairman, and Professor G. C. E. Weber, of Cleveland, Secretary.

Professors Davis of Chicago, Donaldson of Baltimore, and Blackman of Chicago, were appointed a Committee on Credentials. The following named gentlemen were approved as delegates from their respective colleges:—

Professors A. Hammar, of Humboldt Medical College, St. Louis, Mo.; W. N. Byford, Chicago Medical College, Chicago; A. Stillé, University of Pennsylvania, Philadelphia, Penn.; A. B. Palmer, University of Michigan, Mich.; A. B. Palmer, Berkshire Medical College, Mass.; Alden March, Albany Medical College, N. Y.; A. J. Steele, Chicago Medical College, Chicago; N. S. Davis, Chicago Medical College, Chicago; Francis Carter, Starling Medical College, Ohio; James M. Holloway, University of Louisville, Ky.; N. R. Taylor, Medical Department of Iowa University, Iowa; J. C. Hughes, Medical Department of Iowa University, Iowa; G. C. E. Weber, Charity Hospital Medical College, Cleveland, Ohio; F. Donaldson, University of Maryland, Md.; J. N. McDowell, Missouri Medical College, Mo.; C. G. Comegys, Medical College of Ohio, Ohio; George C. Hackrum, Medical College of Ohio, Ohio; E. B. Stevens, Miami Medical College, Ohio; George Mendenhall, Miami Medical College, Ohio; L. O. Gross, Jefferson Medical College, Penn.; B. L. Lawson, Cincinnati College of Medicine; — Read, Cincinnati College of Medicine.

Professor Stillé, of Philadelphia, was chosen permanent Chairman, and Professor Weber, of Cleveland, Secretary.

Professors Holloway of Louisville, Davis of Chicago, Donaldson of Baltimore, Blackman of Cincinnati, and March of Albany, were appointed a committee to report on the order of the different subjects which were to occupy the attention of the Convention. After which the Convention adjourned to 4 o'clock, P.M.

In the afternoon session, this committee reported the following distinct propositions for the consideration of the Convention:—

"1. That every medical student applying for matriculation in a medical college, shall be required to show, either by satisfactory certificates or by a direct examination by a committee of the faculty, that he possesses a thorough knowledge of the common English branches of education, including the first series of mathematics and the natural sciences, and that the certificates presented or the results of the examinations thus required, be regularly filed as a part of the records of each medical college.

"2. That every medical student be required to study not only three full years,

but also to attend three regular annual courses of medical college instruction before being admitted to an examination for the degree of Doctor of Medicine.

"3. That the *minimum* duration of a regular annual lecture term, or course of medical college instruction, shall be five calendar months.

"4. That every medical college shall embrace in its curriculum at least *thirteen* professorships, including substantially the following branches, namely: Descriptive Anatomy, Physiology and Histology, Inorganic Chemistry, Materia Medica, Organic Chemistry and Toxicology, General Pathology and Public Hygiene, Surgical Anatomy and Operations of Surgery, Medical Jurisprudence, Practice of Medicine, Practice of Surgery, Obstetrics and Diseases of Women, Clinical Medicine and Clinical Surgery. That these several branches shall be divided into three groups or series, corresponding with the three years required for medical study. The first, or freshman series, shall embrace Descriptive Anatomy, Physiology and Histology, Inorganic Chemistry and Materia Medica. To these the attention of the student shall be mainly restricted during the first year of his studies, and on them he shall be thoroughly examined by the proper members of the faculty at the close of his first course of medical college instruction, and receive a certificate indicating the degree of his progress. The second, or junior series, shall embrace Organic Chemistry and Toxicology, General Pathology, Public Hygiene, Surgical Anatomy and Operations of Surgery and Medical Jurisprudence. To these the attention of the medical student shall be directed during the second year of his studies, and on them he shall be examined at the close of his second course of medical college instruction, the same as after the first. The third, or senior series, shall embrace Practical Medicine, Practical Surgery, Obstetrics and Diseases of Women, with Clinical Medicine and Clinical Surgery in hospital. These shall occupy the attention of the student during the third year of his medical studies, and at the close of the third course of his medical college attendance, he shall undergo a general examination in all the departments, as a prerequisite for the degree of Doctor of Medicine. The instruction in the three series of branches is to be given simultaneously, and to continue throughout the whole of each annual college term; each student attending the lectures on such branches as belong to his period of progress in study, in the same manner as the sophomore, junior and senior classes each pursue their respective studies simultaneously throughout the collegiate year, in all our literary colleges.

"5. That the practice of selling individual tickets by members of medical college faculties should be abolished, and, in place of it, each student should be charged a specified sum for each annual course of medical college instruction, the sum being the same for each of the three courses before graduating; and any student or practitioner who has attended three full courses in any one college, shall be entitled to attend any subsequent course or courses in that college gratuitously. The fees paid for each annual course of college instruction should be paid to the treasurer of the college, and subsequently distributed to each member of the faculty at such time and in such proportion as the trustees and faculty of each college shall determine.

"6. That inasmuch as the maintenance of an efficient medical college requires a large expenditure of money annually, and inasmuch as there is no reasonable hope of adequate endowment from the several State governments, the exaction of a just and reasonable annual lecture fee is a necessity with which all medical colleges should comply, and that \$105 should be the minimum fee for each regular annual course of instruction in any medical college in the United States."

The first proposition was taken up and discussed by Professors Davis, Gross, Comegys, McDowell, Hammar, Taylor and Palmer, and with an amendment so as to strike out the words "natural sciences," and add "sufficient knowledge of Latin and Greek to understand the technical terms of the profession," it was adopted.

The Convention then adjourned to meet at 9½ o'clock on the 4th instant.



SECOND DAY — MORNING SESSION.

The Convention was called to order at 9½ o'clock, A.M., by the Chairman, Professor Stillé. The minutes of the preceding session were read and adopted. The Chair then announced that the next business in order was the discussion of Section 2 of the Report of the Committee on the Order of Business, which reads as follows :

"That every medical student be required to study three full years, including three regular annual courses of medical college instruction, before being admitted to an examination for the degree of Doctor of Medicine."

Professor Gross, of Philadelphia, moved to amend so as to insert "four" after study, instead of "three."

Remarks were made by Professors Gross, Hammar, of St. Louis, Davis, of Chicago; Palmer, of Michigan; and McDowell, of St. Louis.

The Convention then suspended the rules, for the purpose of allowing Professor Davis to introduce the following resolution :

"Resolved, — That in all distinct propositions under the consideration of this Convention, no member shall speak more than once until all other members have spoken who wish to speak." Adopted.

Professor F. Howard, of Washington City, moved to amend by inserting "not less than three years," instead of "three full years." Lost.

Professor Gross's amendment was then adopted.

On motion of Professor Gross, the entire section, as amended, was unanimously adopted.

Professor Hammar moved to take up for consideration Section 4 prior to Section 3. Lost.

Section 3 was read, viz. : "That the minimum duration of a regular annual lecture term or course of medical college instruction shall be five calendar months."

Professor Gross moved to amend by inserting "six" in place of "five calendar months." Carried.

Section 3, as amended, was then adopted.

Section 4 being next in order, came up for discussion. Professor Gross moved to discuss the different parts of this section separately. First, that relating to the different branches recommended to be taught in the schools. Second, the number of professorships. Third, the division of studies. Adopted.

Professor Hammar moved to add to the different branches Natural Philosophy and Pathological Anatomy.

Professor Donaldson, of Baltimore, moved to act upon these propositions separately.

The vote on the addition of Natural Philosophy being taken, it was rejected.

The amendment adding Pathological Anatomy was carried.

Professor Byford, of Chicago, moved to amend by including diseases of children. Carried.

On motion, the Convention then adjourned to meet at 4 o'clock.

AFTERNOON SESSION.

The meeting having been called to order by the Chairman, the second part of Section 4 was called up for discussion.

Professor Gross moved to amend by inserting after the words "following branches," "to be taught by not less than nine Professors." Carried.

Remarks were made by Professors Gross, Palmer, Davis, Hammar, Howard and Taylor.

The third part of Section 4, referring to the division of studies, was next considered.

Professor Davis moved to amend, by making that part read as follows :

" That these several branches shall be divided into three groups or series, corresponding with the three courses of medical college instruction required.

" The first, or Freshman series, shall embrace Descriptive Anatomy and Practical Dissections, Physiology and Histology, Inorganic Chemistry and Materia Medica, and Therapeutics.

" To these the attention of the student shall be mainly restricted during his first course of medical college instruction, and in these he shall submit to a thorough examination by the proper members of the Faculty, at its close, and receive a certificate indicating the degree of his progress.

" The second, or Junior series, shall embrace Organic Chemistry and Toxicology, General Pathology, Morbid Anatomy and Public Hygiene, Surgical Anatomy and Operations of Surgery, and Medical Jurisprudence. To these the attention of the medical student shall be directed during his second course of medical college instruction, and in them he shall be examined at the close of his second course in the same manner as after the first.

" The third, or Senior series, shall embrace Practical Medicine, Practical Surgery, Obstetrics and diseases peculiar to women and children; with Clinical Medicine and Clinical Surgery in hospital. These shall occupy the attention of the student during his third course of college instruction, and at its close he shall be eligible to a general examination on all the branches as a prerequisite for the Degree of Doctor of Medicine. The instruction in the three series of branches is to be given simultaneously, and to continue throughout the whole of each annual college term; each student attending the lectures on such branches as belong to his period of progress in study, in the same manner as the Sophomore, Junior and Senior classes, each pursue their respective studies simultaneously throughout the collegiate year, in all our literary colleges."

After a protracted debate, in which Professors Gross, Palmer, Blackman, Hammar, Davis and Taylor participated, the motion of Professor Davis prevailed.

Professor Davis then moved the adoption of the entire section as amended. Carried.

Section 5 was then taken up, and, upon motion of Professor Palmer, laid on the table.

Section 6 being in order, was read, but on motion of Professor Gross was also laid upon the table until Monday morning, 6th inst.

On motion of Professor Davis, the Convention then adjourned to meet at 10, A.M., on Monday morning.

#### THIRD DAY—MORNING SESSION.

The meeting was called to order by Professor Stillé at 10 o'clock, A.M.

The minutes of the previous session were read and approved.

The Committee on Credentials announced Dr. T. M. Logan, of Sacramento, California, as an authorized delegate from the Faculty of the Toland Medical College of San Francisco.

Professor Gross moved to reconsider parts of section four, relating to the branches to be taught in medical colleges.

Professor Hammar moved to suspend the rules for that purpose. Carried.

Professor Gross moved to amend part first, section four, by insert-

ing the words "Medical Ethics" after the words "Medical Jurisprudence."

Professor Palmer moved the adoption of the amendment. Carried.

Professor Comegys moved the reconsideration of section one.

After suspension of the rules this motion was adopted.

Professor Comegys moved to amend section 1, by inserting "Elements of Natural Sciences" after the words mathematics. Carried.

Professor Hammar moved the adoption of the whole section as amended. Carried.

Section six was then considered.

On motion of Professor Donaldson it was laid on the table.

Professor Palmer then introduced the following resolution :

"*Resolved*, That every medical college should immediately adopt some effectual method of ascertaining the actual attendance of students upon its lectures and other exercises, and at the close of each session of the attendance of the student a certificate, specifying the time and the courses of instruction actually attended, should be given; and such certificate only should be received by other colleges as evidence of such attendance."

The resolution was adopted.

Professor Davis moved the adoption of all the sections as amended. Carried.

Prof. Gross moved to transmit a copy of these sections as adopted by this convention, certified to by its officers, to the American Medical Association, at its next session.

Prof. Davis then introduced the following resolution :

"*Resolved*, That a committee of five be appointed by the President, whose duty it shall be to present the several propositions adopted by the Convention, to the trustees and faculties of all the medical colleges in this country, and solicit their definite action thereon, with a view to the early and simultaneous practical adoption of the same throughout the whole country. And that the same committee be authorized to call another convention whenever deemed advisable."

The Chair appointed the following gentlemen that committee :— Prof. Davis of Chicago, Donaldson of Baltimore, Gross of Philadelphia, March of Albany, Blackman of Cincinnati.

The Chairman then introduced Dr. Vattier, President of the Cincinnati Academy of Medicine, who invited the members of the Convention to be present at the opening of the Academy in the evening.

Prof. March moved to accept the invitation. Carried.

On motion of Prof. Davis a vote of thanks was returned to the Chairman and Secretary of the Convention for the efficiency with which they have discharged their duties, and to the Faculty of the Ohio Medical College for the use of their hall.

The President returned his thanks to the members of the Convention in a neat and appropriate speech.

Prof. Stevens moved that a formal written thesis on some professional topic shall be regarded as one of the indispensable requirements for the doctorate.

Remarks were made by Profs. Comegys, Stevens and Donaldson.

Professor Davis then rose simply to suggest whether there was not some danger of entering upon the consideration of propositions involving details that might unnecessarily complicate the great leading object for which we have been laboring. Whether the time-honored and universal custom of requiring the medical students to write a thesis should be insisted on or not, would have but little bearing on the great

principles involved in the revision of our system of medical education. If the standard of preliminary education which we have here adopted should be carried into effect, it would remove one of the objects for which the writing of a thesis was originally demanded. Yet, he said, it was desirable to retain the practice, if for no other purpose than to encourage every student in the habit of expressing his thoughts on paper. But the great and all important object of this convention was simply to place the system of medical education in this country upon sound educational principles, by erecting a standard of preparatory education, by increasing the period of study, by adding to the college courses, and by determining a rational order of study. This we have now done, so far as this convention is concerned, by the harmonious adoption of the five propositions already passed upon. And he earnestly suggested whether we had not better stop here, and devote the remainder of our time to the work of devising the most efficient means to secure the adoption and simultaneous practical execution of the provisions already agreed upon by all the Colleges of our country, and leave all minor matters of detail to be determined as time and circumstances should indicate in the future.

Thereupon, on motion of Professor Hammar the Convention adjourned, subject to the call of the Committee.

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*Eighteenth Annual Meeting of the Association.*

The eighteenth annual meeting of the American Medical Association commenced on the 7th inst. at Hopkins's Music Hall, Cincinnati, and was called to order at 11 o'clock, by the President, Dr. Henry F. Askew.

After prayer by Rev. Dr. Storrs, Dr. John A. Murphy, Chairman of the Committee of Arrangements, bade the Association welcome in the following brief and appropriate speech:—

“MR. PRESIDENT AND GENTLEMEN OF THE ASSOCIATION,—It is my pleasant duty to greet you on this occasion, and to give you a cordial welcome to this city. I welcome you also on behalf of the medical profession, and the citizens at large.

“Seventeen years ago this Association honored us with a meeting. Now, as then, we are happy in having the pleasure of greeting representatives from all parts of our beloved country. It is with feelings of no ordinary pleasure that I welcome this Association, American by name, national and catholic in spirit, once more to the hospitalities of our city. Its history is bright with the names and labors of the great and good in all parts of the country. It has harmonized the profession, elevated its tone, stimulated a desire for a higher standard of medical education, and above all has drawn a line, as of fire, between the scientific physician and the empiric, by adopting the code of ethics. Its power for good is hardly to be estimated. Its yearly transactions have received high commendation. No man in the profession can be indifferent to it. Much remains yet to be done to make its labors still more valuable. Without any power from State or National Government, to execute its mandates, it must in the future, as in the past, rely on the union, enthusiasm and scientific labors of its members.

“Having the highest confidence in the capacity of the Association for usefulness, and trusting that its labors may be still more conducive to the advancement of the science and improvement of the art, I bid you God speed in your efforts, and again most heartily welcome you to our city and our homes as distinguished and honored guests.”

He then announced that ladies are invited to all the sessions and recreations of the Association, excepting to the banquet at Melodeon

Hall, and that upon application of their gentlemen friends, ladies will be provided with the necessary accommodations by the Committee of Arrangements.

*President's Address.*—Dr. Askew delivered his annual address. Its tone was deprecatory, rather than laudatory, of the progress of the Association, as manifested in the circulation of the annual reports, which contained valuable knowledge and able papers on subjects interesting to the profession. The membership was three thousand; but the attendance only a tenth of that number. From a thousand to eleven hundred copies of the annual report formerly printed, the number has fallen to six hundred, and these include the copies sent gratis to medical and other journals. Renewed efforts should be made to increase the demand for the reports.

The address next discussed the restrictions of membership, and invited attention to the subject. Specialists, and their efforts to obtain notoriety by advertising, were noticed. The diploma may once have been necessary to vouch for the doctor, but now it is only regarded as a certificate that he has completed his studies, and is qualified to take charge of the life of his patients. The danger in special practice is, that in the disturbance of a part the whole must be affected, and hence the necessity that the patient should have the attention of the general, as well as the special practitioner.

The influence of the Association is to check empiricism and to disseminate the best knowledge among the profession, but not until the schools consent that pupils study and master the elementary branches can the profession attain to perfection. The thoroughness of the European schools was commended.

The subject of opium-eating was noticed next. The speaker stated that its use was almost as extensive and its effect as alarming as that of alcohol. Calls on the apothecary for it were constant. Children were sent for it to the drug store and received it in quantities incredible to those not acquainted with the traffic. The honor, interest and respectability of the profession would be benefited by action to prevent the abuse of opium.

The address touched on other subjects interesting to the Association, and a copy was requested for publication.

*SPECIAL COMMITTEES.*—Reports from the following Committees were called for:

1. On Quarantine, Dr. Wilson Jewell, Pennsylvania, Chairman.
2. On Ligation of Subclavian Artery, Dr. Willard Parker, New York, Chairman.
3. On Progress of Medical Science, Dr. James C. Smith, New York, Chairman.
4. On the Comparative Value of Life in City and Country, Dr. Edward Jarvis, Massachusetts, Chairman.
5. On Drainage and Sewerage of Cities, &c., Dr. Wilson Jewell, Pennsylvania, Chairman.
6. On the Use of Plaster of Paris in Surgery, Dr. James L. Little, New York, Chairman.
7. On Prize Essays, Dr. F. Donaldson, Maryland, Chairman.
8. On Medical Education, Dr. S. D. Gross, Pennsylvania, Chairman.
9. On Medical Literature, Dr. A. C. Post, New York, Chairman.
10. On Instruction in Medical Colleges, Dr. Nathan S. Davis, Illinois, Chairman.
11. On Rank of Medical Men in the Army, Dr. D. H. Storer, Massachusetts, Chairman.
12. On Rank of Medical Men in the Navy, Dr. W. M. Wood, U. S. N., Chairman.
13. On Insanity, Dr. Isaac Ray, Rhode Island, Chairman.
14. On American Medical Necrology, Dr. C. C. Cox, Maryland, Chairman.
15. On the Causes of Epidemics, Dr. Thomas Antisell, District of Columbia, Chairman.
16. On Compulsory Vaccination, Dr. A. N. Bell, New York, Chairman.
17. On Leakage of Gas-Pipes, Dr. J. C. Draper, New York, Chairman.
18. On Alcohol and its Relations to Man, Dr.

J. R. W. Dunbar, Maryland, Chairman. 19. On the Various Surgical Operations for the Relief of Defective Vision, Dr. M. A. Pallen, Missouri, Chairman. 20. On Local Anæsthesia, Dr. E. Krackowitz, New York, Chairman. 21. On the Influence upon Vision of the Abnormal Conditions of the Muscular Apparatus of the Eye, Dr. H. D. Noyes, New York, Chairman. 22. On the Comparative Merits of the Different Operations for the Extraction of Vesical Calculi, Dr. B. J. Raphael, New York, Chairman. 23. On the Therapeutics of Inhalation, Dr. J. Solis Cohen, Pennsylvania, Chairman. 24. On the Deleterious Articles used in Dentistry, Dr. Augustus Mason, Massachusetts, Chairman. 25. On Medical Ethics, Dr. Worthington Hooker, Connecticut, Chairman. 26. On the Climatology and Epidemics of Maine, Dr. J. C. Weston; of New Hampshire, Dr. P. A. Stackpole; Vermont, Dr. Henry Janes; Massachusetts, Dr. Alfred C. Garratt; Rhode Island, Dr. C. W. Parsons; Connecticut, Dr. B. H. Catlin; New York, Dr. E. M. Chapman; New Jersey, Dr. Ezra M. Hunt; Pennsylvania, Dr. D. F. Condie; Delaware, Dr. — Wood; Maryland, Dr. O. S. Mahon; Georgia, Dr. Juriah Harriss; Missouri, Dr. George Engelman; Alabama, Dr. R. Miller; Texas, Dr. Greenville Dowell; Illinois, Dr. R. C. Hamil; Indiana, Dr. J. F. Hibberd; District of Columbia, Dr. T. Antisell; Iowa, Dr. J. W. H. Baker; Michigan, Dr. Abraham Sager; Ohio, Dr. J. W. Russell.

Responses were made to most of the calls. The following is a summary: No. 1, dropped; No. 2, postponed; No. 3, no report — discharged; No. 4, postponed; No. 5, discharged; No. 6, referred to section on surgery; Nos. 7, 8 and 9, postponed; No. 10, set for 10 o'clock, Wednesday; No. 11, granted time; No. 12, paper read by Dr. Pinkney and referred to below; No. 13, no report, which called for some remarks by members, and a resolution by the Association to have the President order the call of the Committee by name. Drs. Lockhart, of Indiana; Jones, of Tennessee; Stokes, of Maryland, and Cabannas, of Mississippi, were called, but no response was made. No. 14, ready; but as it embraces two years, and is lengthy, was referred to section. Nos. 15 and 16, no reports. No. 17, postponed till next year. No. 18, referred to section on hygiene. No. 19, discharged by request. Nos. 20, 21 and 22, no reports. No. 23, referred to section. No. 24, asked time — granted. No. 25, laid on table for future action. No. 26, Drs. Alfred C. Garratt and R. C. Hamil responded, and their papers were referred.

*Report upon the Naval Medical Staff Rank.* — This report was read by Dr. Pinkney, who holds the rank of Commodore in the navy, and appreciates most fully the wrongs of the medical profession in the United States Navy. The following passage will serve to illustrate its character:

"Our service is overgrown with usages which sprung up in the earlier and ruder ages of naval life, and still cling to it with a power and tenacity which almost defy modern enlightenment, progress and even law. It is probable that the National authorities, who organized the existing rank of medical officers, intended to confer a more substantial fact than the usages of ship-board life have permitted. Among the usages of the service, is that which limits an officer's rights and comforts to the apartments in which he messes, even though his rank actually entitles him to higher privileges and greater comforts than belong to those of an inferior rank, who make up the majority of the inmates of that apartment. The steerage is the most humble of those apartments, and is the dwelling place of the very young, or those of no responsibility. The ward-room gathers in it most of the commissioned, and some warrant officers, and was originally occupied by none of higher rank than Lieutenant. All its usages and government are still conformed to the scale of that grade.

"Now, make a medical officer in name an Admiral, and leave him to be ward-room officer, and the title becomes ridiculous. It is sunk below the usages and restrictions originally designed for those of junior years and of inferior rank.

"There is only one mess which is superior to these restrictions, and that is the mess or messes of the commanding officers and their associates, who may range in rank from a Lieutenant Commander to an Admiral. Sometimes there are one, sometimes two of these messes. This is very properly left to the will of the

Commander-in-chief, who may choose that he and his Captains may have one or the separate establishments. The Assistant-Surgeon enters the service with the rank of Master. That this title may not be misunderstood, it may be necessary to explain that it is the lowest rank in the ward-room, for the incumbent is, in modern times, generally a graduate of the Naval Academy, awaiting his promotion to Lieutenantcy. Like the Master, the Assistant Surgeon at once becomes a member of the ward-room mess, and unless the number of partitioned-off sleeping-berths contained in the ward-room are occupied by his seniors, he may have the good fortune to occupy one of those that are dimly lighted by an air-port, six inches diameter. This space is so restricted, and the separation from the common apartment is so slight, that words in an ordinary voice in another become common property."

After further presenting the discriminations against medical men, in regard to ship-board accommodations, Commodore Pinkney said :

"The general law is that no officer shares in prize money unless his name be borne upon the books of the vessel making the captures; but the Admiral or Commander-in-chief has a percentage on all prizes made. The Fleet-Surgeon, as a member of the Commander-in-chief's staff, must be with him in the flag-ship, and, as a rule, at the post of the greatest risk, responsibility and hazard, consequently he is not likely to have his name borne upon the books of the subordinate vessels making captures, and yet no share of prize money is allowed him."

The report suggests the following as the remedy for these evils :—

"1. After they have reached the rank of Commander, or are filling the position of Fleet-Surgeon, let them be by right, as they often have been by courtesy, members of the cabin mess. If the mess of the Commander-in-chief be too exalted a social position for the members of your profession who are filling the important position of Fleet-Surgeon, then let them be members by right of the mess of the Commander of the ship and the Fleet-Captain.

"2. An equitable arrangement of prize money, most important in principle, your Committee hope to see effected. It will, however, require future legislation."

In European countries, the Doctor said, more liberal regulations prevail with regard to naval surgeons than in democratic America.

"The late Admiral Foote, so justly distinguished for his large-minded liberality, advocated the highest rank for naval medical officers. An Admiral, among the most distinguished in the service, has authorized to be officially said that he thought the Fleet-Surgeon should in our service, as in the French, be a member of the Commander-in-chief's staff and family. We regard it as opposed to the public interests of the service, which can never be sacrificed to gross indignity without detriment."

Commodore Pinkney offered in conclusion a resolution that a committee of five be appointed by the Chair to present the subject to the President of the United States and to the Secretary of the Navy. Carried unanimously.

On motion, it was resolved to memorialize Congress to enact a law giving a proper share of prize money to medical naval officers.

The Secretary announced several papers, which were referred to sections, and will come up in regular order hereafter.

The report of the Committee on Publication was read.

The Association refused to abolish the payment of money for prize essays, and substitute a certificate and a hundred printed copies of the essays to the essayist.

On motion it was resolved that the delegates from the different States should meet on the 8th and agree among themselves upon



their candidates on the new committee, and report the same to the Secretary.

The Association then adjourned to meet at the same place at 9 o'clock Wednesday morning.

[The subsequent proceedings of the Association will be continued in our next number.]

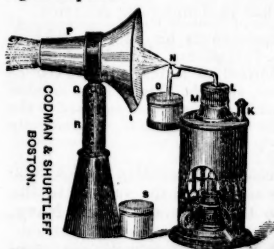
## THE BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON: THURSDAY, MAY 16, 1867.

### STEAM ATOMIZER.

In our issue of April 18, 1867, we spoke of various appliances for atomizing fluids, during which we mentioned the employment of a small portable boiler. We now offer a description of an apparatus of this kind manufactured by Messrs. Codman and Shurtleff, 13 and 15 Tremont Street, Boston. Without wishing to detract from the merits of other inventions, we are free to say that the one we are about to describe is so complete and workmanlike as to leave scarce anything to be desired.

The apparatus represented in the figure is based on the principles of Drs. Siegle and Bergson, but contains important improvements and additions. It is made in the most substantial manner, all the joints in the boiler being both screwed and soldered. It is also provided with contrivances by which its action can be readily adjusted in all necessary particulars, as may be seen by the following description:—



J, Lamp, provided with tube for graduating flame for much or little heat. K, Safety valve, graduating to high or low pressure. By unscrewing the valve tube from its position, the boiler may be supplied with water without disturbing the atomizing tubes. L, Milled button or top. Between this and a suitable projection or shelf within the neck of the boiler, is secured the packing of rubber through which the atomizing tube passes—air- and steam-

tight. M, Mahogany ring to protect the hand from heat in removing the boiler and tubes for the purpose of changing the medicament. N, The atomizing tubes. O, Cup in which the medicament is placed. P, Shield for protecting the patient's face from unpleasant contact with the medicated vapors. Q, Joint allowing the shield to be moved to, and retained at, any necessary deviation from a horizontal position. R, Sliding staff for regulating the height of the shield. By means of the joint Q and the sliding staff, the shield may be adjusted for use by adults or by children. S, Cup for receiving the water of condensation which drops from the face shield P.

*Obsequies of M. Jobert (de Lamballe).*—On the 26th of April, a large assemblage, as we learn from the *Union Médicale*, filled the Church of the Madeleine, in Paris, where the funeral services over the remains of M. Jobert (de Lamballe)—deceased April 19th—were performed with distinguished ceremony.

Marshall Vaillant represented the household of the Emperor. The Academy of Sciences was represented by its President, M. Chevreul, and several of its members, among whom were noticed MM. J. Cloquet, Bertrand, and the Vice Admiral Jurien de la Gravière. At the head of a numerous deputation of the Academy of Medicine walked M. Tardieu, President, M. Ricord, Vice President, M. Bécлар, Annual Secretary. Dr. Conneau represented the medical household of the Emperor, accompanied by MM. Arnal, de Pietra Santa, Davaine, Berrier-Fontaine. The Faculty of Medicine sent a deputation of Professors and "Agréés," in their robes, at the head of whom was the Dean, M. Wurtz. MM. Michel Lévy, Baube, Lecanu represented the Council of Health of the Seine. The chief mourners were the three brothers of M. Jobert. The religious services were conducted by the Curé of Lamballe, who went to Paris to render the last offices to the memory of his eminent compatriot. After the ceremony in the Church, the remains were carried to the cemetery of Montmartre, whence they were to be transported to Lamballe, in accordance with the wishes of the family of the deceased. A large cortege, in which was noticed a great number of persons who had been under the professional care of M. Jobert, accompanied the remains to the cemetery.

Several discourses were pronounced at the tomb. The funeral orators were, M. Conneau, Physician-in-Chief to His Majesty, in the name of the medical household of the Emperor; M. Gosselin, in the name of the Faculty of Medicine; M. Legouest, in the name of the Academy of Medicine; M. Arnal, in the name of the friends of M. Jobert.

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A WRITER in the *Union Médicale* on the origin of French medical journalism, states that the first number of the first French medical journal appeared the 28th of January, 1679. Its author was Nicolas de Blegny, and its title "*Zodiacus Gallicus*."

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*Use of the Acupuncture Needle in the Discovery of a Pistol-Ball.* By Dr. GORDON BUCK.—At a meeting of the New York Pathological Society, Dr. Buck stated that he had successfully employed the acupuncture needle in detecting the ball in a case of gunshot wound in a man who had carried a pistol in his fob. The weapon was accidentally discharged, and its contents were lodged in the groin, immediately below Poupart's ligament, and two inches outside of the femoral. On introducing a probe into the wound, it followed a track over the inner condyle and a little above it, and at its bottom a firm body was encountered that was about the size and shape of the missile that was supposed to have been lodged there. This body could be slipped within a certain limit, and its movement would cause pain. Presuming that it was the ball, there was not certainty enough in the diagnosis to warrant an extraction until the acupuncture needle was used. This was passed down in the situation of the deep-seated lump through the tissues, and encountered the foreign body. By certain manipulations it was found to escape from the point of the instrument and roll aside, which fact left no doubt in the mind of the presence of the projectile at that point. It was then cut down upon with a narrow-bladed knife, and removed without difficulty. Dr. Buck remarked that his attention had been first called to

the needle by seeing a published account in some of the medical periodicals of its use by a Scotch army surgeon, whose name he did not recollect. Dr. Buck also stated in this connection that he had employed the same procedure with success in discovering the existence of a calcareous body impacted in the prostate gland. The needle in this instance was curved, and was introduced into the gland upon the finger as a guide. The needle is very fine, and has a trocar point in order to facilitate its entrance into the tissues.—*Ranking's Abstract.*

*On Exercise in Hysteria.* By Mr. F. C. SKEY, F.R.S., Consulting Surgeon to St. Bartholomew's Hospital.—On this subject, Mr. Skey remarks: "Such exercise should be active—neither strolling nor sauntering out of doors, 'to take the air,' as ladies term it, nor gardening, nor lounging about—but adopting a good brisk walk, at a pace of at least three miles an hour, *ever stopping short of fatigue.* People will often tell you they 'take plenty of exercise about the house, and they are on their legs during many hours of the day.' This is fatigue without exercise. What we want for health is exercise without fatigue, for fatigue is exhaustion, and it is to be obtained only on the terms which I have mentioned. I do believe there are many maladies, or at least many forms of indisposition, which, with a strong will, may be walked away, provided the exercise be taken systematically, and rendered a prominent feature in the daily treatment. The distance walked should be increased daily, and a claim made on increasing exertion. I doubt, whether horse exercise, however agreeable, or however stimulating both to mind and body, is equal in sanitary value to exercise on foot.—*Ibid.*

#### VITAL STATISTICS OF BOSTON.

FOR THE WEEK ENDING SATURDAY, MAY 11th, 1867.

##### DEATHS.

	Males.	Females.	Total.
Deaths during the week	35	39	74
Ave. mortality of corresponding weeks for ten years, 1856—1866	36.0	37.7	73.7
Average corrected to increased population	00	00	81.38
Deaths of persons above 90	0	0	0

THE readers of the Journal may have noticed that an extra sheet of reading matter was contained in our issue of April 25th. The same plan is adopted this week, to make room for the valuable papers and interesting proceedings which have crowded in upon us.

**JOURNALS RECEIVED.**—Medical Record, Nos. 28 and 29.—New York Medical Journal for April.—Medical and Surgical Reporter, Vol. xvi., Nos. 14—18.—Medical News and Library for May.—Chicago Medical Journal for April and May.—Cincinnati Lancet and Observer for April.—Nashville Journal of Medicine and Surgery for April.—Southern Journal of the Medical Sciences for May.—New Orleans Medical and Surgical Journal for May.—Pacific Medical and Surgical Journal for March.—Canada Medical Journal for March and April.—L'Union Médicale, Nos. 37—51.—London Lancet (veprint) for April.—American Journal of Pharmacy for May.—Detroit Review of Medicine and Pharmacy for April.—Druggists' Circular for April and May.—Dental Cosmos for April and May.—American Eclectic Medical Review for April.—University Journal of Medicine and Surgery, No. 14—15.—St. Louis Medical Reporter, Vol. ii., Nos. 3—5.—Cincinnati Journal of Medicine for February, March, April and May.—Journal de Médecine de Bordeaux for April.—Atlanta Medical and Surgical Journal for April and May.—Galveston Medical Journal for March.—Buffalo Medical and Surgical Journal for April.—Journal of Materia Medica for April.—New England Medical Gazette for April.—Herald of Health for May.—Hall's Journal of Health for May.

**DEATHS IN BOSTON** for the week ending Saturday noon, May 11th, 74. Males, 35—Females, 39. Abscess, 1—accident, 2—amputation, 1—anaemia, 2—congestion of the brain, 1—disease of the brain, 5—consumption, 11—convulsions, 3—cyanosis, 1—debility, 2—dropsy, 1—drowned, 1—dysentery, 1—erysipelas, 2—scarlet fever, 5—typhoid fever, 2—gastritis, 1—disease of the heart, 5—intemperance, 1—disease of the liver, 1—inflammation of the lungs, 4—old age, 2—peritonitis, 1—premature birth, 3—puerperal disease, 1—purpura, 1—pyæmia, 1—smallpox, 6—unknown, 5—whooping cough, 1.

Under 5 years of age, 24—between 5 and 20 years, 5—between 20 and 40 years, 25—between 40 and 60 years, 11—above 60 years, 9. Born in the United States, 60—Ireland, 15—other places, 9.